REMARKS

Claims 1-8 are pending in this application. By this Amendment, claims 1 and 5-7 are amended for clarity. No new matter is added. Reconsideration in view of the above amendments and the following remarks is respectfully requested.

Applicants appreciate the courtesies shown to Applicants' representative by Examiner Lee in the March 1, 2011 telephone interview. Applicants' separate record of the substance of the interview is incorporated into the following remarks.

I. Claim Rejection Under 35 U.S.C. §112

The Office Action rejects claim 7 under 35 U.S.C. §112, second paragraph as allegedly indefinite. Applicants respectfully traverse the rejection.

As discussed and agreed to in the telephone interview, by this Amendment, claim 7 is amended such that it complies with all of the requirements of 35 U.S.C. §112.

Accordingly, Applicants respectfully request withdrawal of the rejection.

II. Claim Rejections Under 35 U.S.C. §103

The Office Action rejects claims 1-5 under 35 U.S.C. §103(a) as allegedly unpatentable over Mufford (U.S. Patent No. 6,186,254) in view of Wheat (U.S. Patent No. 6,727,013); rejects claims 6 and 7 under 35 U.S.C. §103(a) as allegedly unpatentable over Pearson (U.S. Patent No. 6,555,989) in view of Mufford and Wheat; and rejects claim 8 under 35 U.S.C. §103(a) as allegedly unpatentable over Pearson in view of Mufford, Wheat, and Iwasaki (U.S. Patent No. 6,497,972). Applicants respectfully traverse the rejections.

A. The Office Action's Reliance on Wheat in Combination with the Remaining Applied References is Improper

As discussed in the telephone interview, Applicants respectfully submit that Wheat is directed to an energy management system that controls the temperature of a fuel cell system while a vehicle is not running. See the Abstract of Wheat. In response to this submission,

Examiner Lee asserted that the fact that the vehicle is not running does not necessarily mean that the fuel cell within the vehicle is not running. Applicants direct to col. 6, lines 21-31 of Wheat. Herein it is described that before running the fuel cell to generate heat, the fuel cell controller 160 confirms that the vehicle is not running and is in park. Once it is determined that the vehicle is not running and is in park, the fuel cell controller 160 operates the fuel cell stack 102 until the desired heating has occurred. Subsequently, the fuel cell controller 160 stops the blower and deactivates the hydrogen flow.

As is clear from the teachings of Wheat, the various determinations therein to generate heat with the fuel cell are all made only when the fuel cell is not in operation. It is clear from the teachings of Wheat, that the control of the temperature of the fuel cell is only undertaken while the vehicle and fuel cell are not in operation.

Independent claim 1 recites, *inter alia*, "determine whether to stop power generation operation during intermittent operation based on at least a temperature of a specific component that is external to the fuel cell and that contains moisture, from among a plurality of components constituting the fuel cell system while operation of the fuel cell system is being carried out" and "the temperature of the specific component is measured while the operation of the fuel cell system is being carried out." Independent claim 6 recites, *inter alia*, "the means for determining determines the risk of freezing while the operation of the fuel cell system is being carried out."

One skilled in the art would not have looked to the teachings of Wheat in order to arrive at the claimed subject matter, as Wheat is clearly directed to control of the temperature of a fuel cell while the operation of the fuel cell is not being carried out. As such, the combination of Wheat with the remaining applied references is improper.

B. Independent Claim 1

As discussed in the telephone interview, Applicants respectfully submit that the applied references fail to disclose and would not have rendered obvious, at least, a control device that controls a fuel cell system to operate intermittently by switching between a power generation state and a power generation stop state of a fuel cell, wherein the control device is configured to determine whether to stop power generation operation during intermittent operation based on at least a temperature of a specific component that is external to the fuel cell and that contains moisture, from among a plurality of components constituting the fuel cell system while operation of the fuel cell system is being carried out, and the temperature of the specific component is measured while the operation of the fuel cell is being carried out, as recited by independent claim 1.

Specifically, as discussed and agreed to in the telephone interview, the above claim language has been amended such that it is not functional. As such, Applicants respectfully submit that the claims clearly distinguish themselves over the prior art in terms of structure and request that the above claim limitation be given patentable weight.

As discussed and agreed to in the telephone interview, Mufford merely describes the use of a cooling medium to cool or heat the fuel stack when necessary. See col. 4, lines 23-53 of Mufford. There is no discussion within Mufford of a determination whether to stop power generation operation...while operation of the fuel cell system is being carried out.

Wheat does not cure the deficiencies of Mufford. As Wheat is directed to the generation of heat within a fuel cell by making a determination to enable the fuel cell only while the fuel cell is not in operation, as discussed above, it cannot disclose or render obvious a determination whether to stop power generation operation...while operation of the fuel cell system is being carried out, and cannot disclose or render obvious the temperature of the specific component is measured while the operation of the fuel cell is being carried out.

Neither Pearson nor Iwaskai cure the deficiencies of Mufford and Wheat.

C. Independent Claim 6

As discussed in the telephone interview, Applicants respectfully submit that the applied references fail to disclose and would not have rendered obvious, at least, a fuel cell system having a control device that controls the fuel cell system to operate intermittently by switching between a power generation state and a power generation stop state of a fuel cell, the fuel cell system including control means that is configured to forbid the switching from the power generation state to the power generation stop state and to continue the power generation state when it is determined that the risk of freezing is high, as recited by independent claim 6.

The Office Action admits that Pearson fails to disclose this feature, however, relies upon Mufford as allegedly curing the deficiencies of Pearson.

As discussed and agreed to in the telephone interview, Pearson merely describes a resister that functions as a block heater that prevents the fuel stack from freezing and facilitates start up in cold weather. The disclosure of a block heater used to prevent the fuel stack from freezing does not correspond to the forbidding of switching from the power generation state to the power generation stop state and to continue the power generation state. The disclosure of a block heater used to prevent freezing does not render obvious the forbidding of switching from the power generation state to the power generation stop state and to continue the power generation state when it is determined that the risk of freezing is high.

Neither Wheat nor Iwaskai cure the deficiencies of Mufford and Pearson.

D. In Sum

The applied references fail to disclose or render obvious each and every element of independent claims 1 and 6. As such, independent claims 1 and 6 are patentable. Dependent

claims 2-5, 7, and 8 are also patentable, at least, for their dependency on independent 1, as well as for the additional features they recite.

Accordingly, Applicants respectfully request withdrawal of the rejections.

III. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

James A. Oliff
Registration No. 27,075

Kevin Ross Davis
Registration No. 64,667

JAO:KRD/plj

Date: March 11, 2011

OLIFF & BERRIDGE, PLC
P.O. Box 320850
Alexandria, Virginia 22320-4850
Telephone: (703) 836-6400

DEPOSIT ACCOUNT USE AUTHORIZATION
Please grant any extension necessary for entry of this filing; Charge any fee due to our Deposit Account No. 15-0461